

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE CLAIMS

Claim 12 has been amended to clarify the features of the present invention whereby the virtual document data obtaining means obtains plural virtual document data each including plural individual pages each in a format with a page number added; whereby the plural virtual document data are formed by designating a virtual printer while using respective different kinds of application programs such that the plural virtual document data comprises a plurality of types of virtual document data corresponding to the respective application programs; and whereby the plural virtual document data contain specific page numbers which have been formed by the respective application programs. (See Fig. 3 and the disclosure in the specification at page 11, line 27 to page 15, line 16.)

In addition, claim 12 has been amended to recite the feature of the present invention whereby display means displays the plural virtual document data stored in the storage means, as supported by the disclosure in the specification at page 15, lines 21-26.

Still further, claim 12 has been amended to clarify the features of the present invention whereby the editing means selects respective plural individual pages to form an output virtual document to be outputted, from among the plural individual pages included in the plurality of types of virtual document data of the plural virtual document data displayed on the display means, and designates an output page order for the selected individual pages in the output virtual document; and whereby the controlling means: (i) reads out the selected plural individual pages of the output virtual document from the storage means, (ii) changes the specific page numbers to page numbers corresponding to the output page order of the output virtual document, and (iii) outputs the plural individual pages of the output virtual document with the changed page numbers. (See the disclosure in the specification at page 15, line 17 to page 22, line 14)

Claim 13, moreover, has been amended to better accord with amended independent claim 12.

Claim 17 has been amended to clarify the features of the present invention whereby the converting means converts a plurality of individual document data formed by respective different application programs to have specific page numbers into drawing records to form virtual document data; and whereby the editing means edits page positions of output virtual document

data to be outputted, based on the page information of the virtual document data displayed on the display means. (See Figs. 3, 7 and 8 and the disclosure in the specification at page 11, line 27 to page 22, line 14.)

And program code claims 19 and 21 have been amended to accord with amended claims 12 and 17, respectively.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered.

THE PRIOR ART REJECTION

Claims 12-21 as set forth in the Amendment filed May 18, 2004 were all rejected under 35 USC 103 as being obvious in view of the combination of previously cited USP 6,327,599 ("Warmus et al") and newly cited USP 6,480,866 ("Mastie"), together or in further combination with one of previously cited USP 5,588,103 ("Aoyagi") and USP 6,470,363 ("Kanerva et al"). These rejections, however, are respectfully traversed with respect to the claims as amended hereinabove.

According to the present invention as recited in amended independent claim 12 (and amended program code claim 19), virtual document data obtaining means are provided for obtaining plural virtual document data each including plural individual pages each in a format with a page number added. The plural virtual

document data are formed by designating a virtual printer while using respective different kinds of application programs such that the plural virtual document data comprises a plurality of types of virtual document data corresponding to the respective application programs. And the plural virtual document data contain specific page numbers which have been formed by said respective application programs.

In addition, according to the present invention as recited in amended independent claim 17 (and amended program code claim 21), the converting means converts a plurality of individual document data formed by respective different application programs to have specific page numbers into drawing records to form virtual document data.

That is, according to the claimed present invention as recited in the amended claims, a plurality of different application programs form a plurality of document data, each of which has been paginated by its respective application program, and the already paginated document data from the plurality of application programs is obtained/converted to virtual document data, for example, by designating a virtual printer, as recited in amended independent claim 12.

Then, as recited in amended independent claim 12, the plural virtual document data is displayed and edited to form an output virtual document from the plurality of individual pages in the

plurality of virtual document data formed by the respective application programs. That is, individual pages created by respective different application programs are edited together to form a single output virtual document with a new output page order. And, according to the present invention as recited in amended independent claim 12, the controlling means reads out the selected plural individual pages which make up the output virtual document and changes the specific page numbers (formed by the original respective different application programs) to page numbers which correspond to the new output page order of the output virtual document. Then the repaginated output virtual document is outputted.

According to the present invention as recited in amended independent claim 17, moreover, page information included in the virtual document data is displayed, and the editing means edits page positions of output virtual document data to be outputted, based on the page information of the virtual document data displayed on the display means. That is, the individual pages formed by the respective different application programs to have specific page numbers are edited to be ordered in a new page order for the output virtual document.

With this structure, the document processing apparatus (and program code) of the claimed present invention can process virtual document data which has been formed using different

application programs by designating the virtual printer, or by converted data from the application programs into drawing records. That is, no separate application program is required to integrate the output documents of the plurality of different application programs, since their normal printing function is used. As a result, the document processing apparatus (and program code) of the claimed present invention can display and edit data formed by using application programs having normal printout function, as the virtual document data so as to form new print data.

In addition, with the document processing apparatus (and code) of the claimed present invention, the stored plural virtual document data from the different application programs are edited such that, for example, the page numbers from the respective programs are changed into new page numbers, and the edited virtual document data are used again as new print out data.

As recognized by the Examiner, Warmus et al discloses a technique whereby master and variable page files and a press command file are converted into bitmaps which are SPOOL-stored for printing. It is respectfully submitted, however, that Warmus et al does not disclose that the bitmaps formed by various respective application programs are all converted into virtual document data. In addition, it is respectfully submitted that

Warmus et al merely discloses that the bitmaps are SPOOL-stored for normal printing purposes.

Accordingly, it is respectfully submitted that Warmus et al does not disclose, teach or suggest the feature of the present invention whereby data from a plurality of different respective application programs is converted into virtual document data. And it is respectfully pointed out that Warmus et al also does not disclose that the bitmaps which are SPOOL-stored for printing (which the Examiner contends corresponds to the virtual document data of the claimed present invention) are then edited to form a new output virtual document with a new page order.

As recognized by the Examiner, Mastie discloses modifying individual pages to fit a framework. However, it is respectfully submitted that Mastie does not disclose that the individual pages are virtual document data from various application programs which is reused to form an output virtual document. That is, Mastie discloses that a specific application program is required to reformat the individual pages into a framework, which is a disadvantage overcome by the claimed present invention. And it is respectfully submitted that Mastie does not disclose, teach or suggest the feature of the present invention whereby pages of virtual data from a plurality of application programs (for example, virtual data formed by designating a virtual printer or

by forming drawing records) are reordered to form a new output virtual document which is made up of individual pages of virtual document data from the respective application programs.

Still further, it is respectfully submitted that Aoyagi and Kanerva et al also do not disclose, teach or suggest this feature of the present invention as recited in the amended claims.

Accordingly, it is respectfully submitted that even if Warmus et al, Mastie, Aoyagi and Kanerva et al were combinable in the manner suggested by the Examiner, the structural features and advantageous effects of the claimed present invention still would not be achieved or rendered obvious.

In view of the foregoing, it is respectfully submitted that the present invention as recited in the amended claims clearly patentably distinguishes over all of the cited references, taken singly or in combination, under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

Application No. 09/449,699
Response to Office Action

Customer No. 01933

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,



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